



UN-REDD
PROGRAMME



**MYANMAR UN-REDD TECHNICAL ASSISTANCE
INTEGRATING MANGROVES SUSTAINABLE MANAGEMENT, RESTORATION, AND
CONSERVATION INTO REDD+ IMPLEMENTATION IN MYANMAR**

FINAL EVALUATION REPORT

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Project Information

This report presents findings of the final evaluation of the project titled “UN-REDD Technical Assistance: Integrating mangroves sustainable management, restoration and conservation into REDD+ Implementation in Myanmar” summarized in the table below.

Project Information	
Project Title	Integrating mangroves sustainable management, restoration, and conservation into REDD+ Implementation in Myanmar (“UN-REDD Mangroves TA to Myanmar”)
Project Number	00123986 (UNDP)
Programme Objective	Sustainable management, restoration and conservation of mangroves contribute to the achievement of the overall goals of the National REDD+ Strategy, in terms of emissions reductions and enhanced livelihoods of local communities
Country and Regions Covered	Myanmar
Project Duration	August 2020 – June 2024
Project Budget	USD 2,013,443
Project Expenditure at the time of Evaluation	USD 1,996,001.08
Donor	Government of Norway
Key Stakeholders	I/NGOs, CSOs, Communities from the delta and southeast Myanmar
Participating UN Agencies	UN-FAO, UNDP, UNEP

Evaluation Information	
Evaluation Type	Project
Final/midterm review/other	Final Evaluation
Period under evaluation	August 2020 – June 2024
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List of Acronyms

CDE	Centre For Development and Environment
CEDA	Community And Environmental Development Association
CF	Community Forestry
CFE	Community Forestry Enterprise
CFP	Community First Programme Of UNDP
CFUGs	Community Forest User Groups
CPA	Community Protected Area
CSO	Civil Society Organizations
DANIDA	Danish International Development Agency
ECCDI	Ecosystem Conservation and Community Development Initiative
ET	Evaluation Team
FAO	Food And Agriculture Organization
FD	Forest Department
FBI	Fauna & Flora International
GCF	Green Climate Fund
GEF	Global Environment Facility
GNETR	Green Network Tanintharyi Region
IWG	Interagency Working Group
KNU	Karen National Union
LDCF	Least Developed Countries Fund
LULC	Land-Use and Land-Cover
MERN	Myanmar Environment Rehabilitation-Conservation Network
MFF	Mangroves For the Future
MONREC	Ministry Of Natural Resources and Environmental Conservation
MPTF	Multi-Partner Trust Fund
NDCs	Nationally Determined Contributions
NFI	National Forest Inventories
NFMS	National Forest Monitoring Systems
NGOs	Nongovernment Organizations
NICFI	Norway International Climate Forest Initiative
NMSP	New Mon State Party
NRS	National REDD+ Strategy
OECD DAC	Organization For Economic Co-Operation and Development's Development Assistance Committee
PAMs	Policies And Measures Outlined in Myanmar's National REDD+ Strategy
PMU	Programme Management Unit Of UNDP
RBP	Results Based Payments
SIS	Safeguards Information System
TA	Technical Assistance
ToC	Theory Of Change
ToR	Terms Of Reference
UNDP CO	UNDP Country Office
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP-WCMC	The UN Environment Programme World Conservation Monitoring Centre
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

1. This report presents the evaluation of the UN-REDD Mangroves Technical Assistance (hereafter referred to as the TA). The TA was implemented by the three UN-REDD agencies (UNDP, FAO, UNEP) in partnership with local NGOs and CSOs to support Myanmar in reducing its emissions as well as enhancing livelihoods of mangrove communities in six districts (covering 56% of national mangrove cover) in Ayeyarwady, Mon, Rakhine and Tanintharyi. The overall goal of the project was to support sustainable management, restoration, and conservation of mangroves ecosystems to contribute to the achievement of the overall goals of the National REDD+ Strategy (NRS), in terms of emissions reductions and enhanced livelihoods of local communities.
2. The TA, started in September 2020 with funding from Norway International Climate Forest Initiative (NICFI) with a budget of US\$2,013,443 to implement four outputs, namely (i) Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms, (ii) Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change, (iii) Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national climate change mitigation goals, and (iv) Operational models of community-led management of land and forests. Initially, the project was to be implemented from September 2020 to August 2022. However, the coup in February 2021 and the COVID-19 pandemic necessitated changes to the project activities and caused significant disruptions to the implementation resulting in three no-cost extensions until June 2024. The scope of the evaluation therefore covers the original project design and the changes that were made after the coup.
3. This TA is important because mangrove forests in Myanmar are undergoing tremendous pressures both from anthropogenic and from natural disturbances, resulting in high rates of deforestation and mangrove degradation. Myanmar has about 500,000 hectares of mangroves along its 2832km coastline. Myanmar also has an estimated 4 percent of the world's mangroves and 8.8 percent of the mangroves found in Southeast Asia with the largest area of mangroves in Asia after Indonesia and Malaysia. However, mangrove forests in Myanmar are undergoing high rates of deforestation and degradation through conversion to rice paddies, charcoal production, and aquaculture for shrimp farming, although extreme weather events have also contributed to losses. It is estimated that mangrove cover has declined by 52% over 20 years, from 13,233 km² in 1996 to 8,907 km² in 2007 to 6,287 km² in 2016. The main barriers to effective mangrove management, conservation, restoration, and sustainable management are: (i) a lack of modern, effective regulations governing mangrove management, combined with a lack of coordination among institutions; (ii) a lack of accurate and adequate data to inform management decisions; (iii) a lack of inclusive and participatory planning mechanisms; and (iv) a lack of models of effective management under different circumstances. The TA was designed to contribute towards addressing these challenges.
4. The TA implementation is complete, and this evaluation assesses whether the project achieved its goal, achievements and project's objectives and outputs as specified in the project document, and its subsequent revisions. The specific objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can improve the sustainability of benefits from the project and produce recommendations that can inform actors and donors in supporting and designing future mangrove conservation programs and REDD+ implementation in Myanmar and other countries.
5. The evaluation was conducted according to the guidance, rules and procedures established by UNDP and adhere to the UN Evaluation Group's Norms and Standards including the guidance on Integrating Human Rights and Gender Responsive Evaluation. In addition, the ToR required that the evaluation also utilize the Organization for Economic Co-operation and Development's Development Assistance Committee criteria (assessing relevance, effectiveness, efficiency, and sustainability). The primary audience for this final evaluation of the TA are the three UN agencies, their implementing partners, the UN-REDD Secretariat, and the NICFI.

Key Findings

6. **Design and Relevance:** The project design was sound and based on extensive background analysis of the national circumstances and the original set of interventions clearly contributed to the capacity of Myanmar to transition from REDD+ readiness to implementation. The TA four outputs are highly relevant and were formulated in line with the UN-REDD Programme support to countries to reduce emissions from deforestation and forest degradation and the more immediate framework of the UN-REDD Global Technical Assistance to integrate mangroves into REDD+ implementation in Myanmar. Mangroves are among the most productive ecosystems in the world. Their high rates of net primary productivity deliver significant ecosystem goods and benefits to society, including support to coastal fisheries, shoreline stabilization, timber and non-timber forest products, protection from coastal storms, storm surges and tsunami, and sequestration of carbon dioxide.
7. **Effectiveness and Efficiency:** The coup in February 2021 had a major impact on the project, resulting in changes in implementation modality and discontinuation of activities that were supposed to be implemented in partnership with government agencies. Inability to work with government agencies left a major gap, but the decision to partner with NGOs and CSOs was strategic and allowed continued support to communities. UN-REDD agencies partnered with Myanmar Environment Rehabilitation-conservation Network (MERN), Centre for Development and Environment (CDE), and Ecosystem Conservation and Community Development Initiative (ECCDI), which enabled continuation of CSOs and community-centred support. This approach was in line with the UNDP's Community First Programme (CFP) 2021-2023 formulated to meet the basic needs of the most vulnerable populations and to foster resilience to current and future shocks following the coup. The CFP adopted a human-rights based approach seeking to restore, to the extent possible, the foundations for democratic participation and respect for multi-stakeholder inclusion.
8. The project suffered significant delays and sought three no-cost extensions. Operational efficiency could not be achieved because of the political uncertainty and restrictions on movement due to the COVID-19 pandemic. International experts could not travel to Myanmar and project meetings, workshops, and consultations were limited to small groups in some cases hence more gatherings were held to increase coverage.
9. **Sustainability:** There are observable opportunities for sustaining the gains from the TA. Feedback from local communities visited during this evaluation suggests increased awareness and understanding of the value of mangroves and communities are committed to becoming stewards of their own resources. Communities feel they benefited from training programs in management planning, business strategy, and financial management.
10. With the uncertainty of the political situation in Myanmar, it is commendable that the UN-REDD Programme persisted with the implementation of the TA activities and took major adaptive management measures to work with NGOs and CSOs to reach communities. The ET agrees that the TA work with local organizations provided a way to increase awareness on the intrinsic value of mangrove forests and habitats preservation. The partnerships provide a promising setting for sustained stewardship by local communities. Some of the products and outputs are easier to sustain while others will require additional support. The safeguards guidance package and the spatial analysis can be available in the long-term if the online platform is maintained. However, the capacity for implementation can diminish unless there is sustained support for NGOs and CSOs to continue working with communities, including frequent monitoring, and reporting and continued provision of capacity building to Community Forest User Groups. MERN piloted the safeguards checklist with a small selection of Community Forests (CF) in Ayeyarwady. More funding would be needed for upscaling beyond the pilot communities.
11. Achievements from the outputs will contribute to future implementation of REDD+ in Myanmar and require measures to ensure security of data and monitoring systems for Output 2, continuous support for NGOs/CSOs to continue working with mangrove dependent communities and upscaling of CFs, Community Forestry Enterprises (CFE) and Community Protected Areas (CPA). While achievements from Output 3 may

be limited, they remain relevant and an option for follow-up in the future as well as being useful lessons for other forest sectors and neighboring countries.

12. As a fragile and conflict affected country, Myanmar is confronted with major development challenges, which threaten efforts to end extreme poverty and produce a more equitable future. Natural resources in Myanmar face the threat of complete destruction due to a breakdown in the rule of law, absence of environmental law enforcement and lack of governance. This situation is exacerbated by climate variability which disrupts production systems, leading to food insecurity, malnutrition, and increased social tensions. Environmental degradation trajectories, such as deforestation, loss of soil fertility and erosion, and pollution can ignite violent conflict over natural resources. Such dynamics can intensify resource competition, particularly for water and arable land, causing conflicts between groups. Climate-induced migration and displacement puts pressure on natural resources, driving resource scarcity and fueling social tensions.
13. Unless there is a continuation of the quasi-extension services that NGOs and CSOs are providing, the motivation for mangrove management and protection may diminish. Communities are independently managing CFEs and continuing conservation activities, but regular monitoring and support is necessary. As noted, conflict can have profound and multifaceted impacts on environmental conservation and Myanmar now faces direct environmental damage ranging from habitat destruction, pollution, to deforestation because of weakening of institutions leading to gaps in regulatory framework and inadequate natural resource governance. Conservation efforts have been disrupted and there is a high risk that research facilities and valuable scientific data could be lost, setting back conservation efforts by years or even decades. There is a risk of increased illegal exploitation of resources including over-exploitation of marginal and vulnerable areas such as mangroves for timber, firewood, and agriculture will result in unprecedented degradation and loss of biodiversity. There is a further significant risk that Myanmar will see a rise in poaching and illegal wildlife trade as law enforcement breaks down and rebel groups or militias exploit natural resources to fund their activities.
14. **General Conclusion:** The project was designed with a highly relevant set of interventions well aligned to the objectives of the National REDD+ Strategy and to contribute to Myanmar's NDC obligations. While the project made significant achievements, the impact of the coup in February 2021 curtailed the potential sustainability and long-term impact. The UN-REDD Programme should be commended for persisting with implementation and adapting to the situation by partnering with local NGOs and CSO to reach communities. An easy option would have been to abandon the implementation, but the continuation was an important decision that recognized, in part, countries in conflict situations face many challenges and the protection of natural resources is vital.
15. However, the absence of follow-on support is concerning and should be a global concern for development partners. Myanmar remains a signatory to a wide range of international agreements including the UNFCCC, the Convention on Biological Diversity, RAMSAR Convention on wetlands, and CITES. Local communities can play a bigger role but require essential financial and technical support which can be provided by and through NGOs and CSOs, such as MERN and CDE with backstopping from the UN agencies as has been the case for this TA.
16. Recognizing the need for conflict-sensitive climate change financing strategies is crucial, as they must go beyond purely technical approaches and consider the dynamics of power distribution, access to resources, and social order within vulnerable populations. The lack of explicit recognition of fragility and conflict in international climate change negotiations, multilateral agreements, and aid prioritization has significant negative implications. Conflict-sensitive financing strategies must strive to empower communities, including those that are marginalized, and ensure their meaningful participation and decision-making.
17. **Conclusion 1:** In the absence of enhanced regulatory frameworks and functional natural resource governance, NGOs/CSOs are perhaps the only option to support and enhance natural resource stewardship by communities. The safeguards capacity building, data collection and development of forestry inventory methodologies, and monitoring systems will require updating and upscaling therefore additional support would be necessary. Myanmar is at risk of brain drain and loss of experts who have worked on REDD+ for many years and are now redundant.

18. **Recommendation 1:** The UN-REDD Management Group should follow-up discussions with Norway and other member countries to consider continuing to support efforts to protect mangrove ecosystem using the partnership model established under this TA. The implementation model of this TA has been in fact successful and should serve as a model to sustain support for improving sustainable management of not only the mangrove ecosystems, but for the entire forestry sector.
19. **Conclusion 2:** At the activity level, results from Output 2 (data, maps, models, guidance etc.) can easily be maintained with minimum effort. Similarly, the capacity building for development and implementation of CF and CPA management plans, and CFE business plans provide a direct opportunity for communities to build lasting livelihood options, but without continued support and extension services and access to finance, there is a risk that villagers may revert to unsustainable practices. This risk is amplified by the fact that some communities have limited access to land, lack land rights and lack official land titles which reduces the motivation for resource stewardship due to the absence of government assistance.
20. **Recommendation 2:** Under the political uncertainty in Myanmar, natural resource monitoring systems remain critical and do not necessarily require engagement with the de facto government. FAO could consider continuing supporting remote sensing work for forest monitoring and could coordinate with NGO and CSOs to collect data on the ground as has been the case during the implementation of the TA. On safeguards, UNEP and UNEP-WCMC could also continue to work in partnership with local NGOs and CSOs to monitor safeguards implementation and maintain capacity that could be harnessed in the future. In any case, sustaining the capacity of civil society organizations would be essential for subsequent implementation of a subnational REDD+ programs that allow meaningful participation of stakeholders.
21. **Conclusion 3:** The conflict situation is particularly concerning for many ethnic women who make a living by selling forest products and are primary users and managers of the forests. Ethnic women are also engaged in various forest activities, such as establishing nurseries for plantations; selecting seedlings and tree species; replanting timber trees; practicing controlled burning for assisting regeneration; and protecting germinating seedlings and new saplings among other activities and have thus contributed to the prevention of forest degradation.
22. **Recommendation 3:** UN agencies are already working directly focusing on humanitarian and resilience building support in the very same communities and groups affected by persistent conflict, widespread insecurity, surging displacement, and disrupted basic services and destruction of natural resources they rely on for food security. While upscaling activities to support forest dependent communities would prove to be challenging given the lack of engagement with the de facto military leadership and impeded access, the budget to sustain the work of local NGOs and CSOs can be modest but goes a long way to sustain the motivation of local communities to continue forest and mangrove protection activities and safeguard their livelihoods. Villagers understand the value of mangroves and are committed to conservation. There is evidence of empowered communities continuing to manage, conserve, and engage in sustainable business practices within the mangrove ecosystem. Communities feel they benefited from training programs in management planning, business strategy, and financial management. Considerations could be made to integrate environmental and natural resource protection into humanitarian programs, including development of longer-term durable solutions. This evaluation has observed a low participation of women and the UN-REDD agencies are encouraged to formulate actions that encourage higher participation by women. It is therefore necessary that measures continue to be in place to support and protect women and allow continuation of livelihood activities. This is perhaps one of the critical reasons why continued engagement with local partners is necessary.
23. **Conclusion 4:** Protecting natural resources in conflict-affected countries like Myanmar requires a multifaceted approach that addresses the complex interplay between environmental conservation, security, governance, and socio-economic development. There are multiple recommendations that require a coordinated effort among local communities, international organizations, NGOs, and the private sector. Balancing the immediate needs of conflict-affected communities with long-term environmental sustainability is critical for ensuring the protection and sustainable use of natural resources in these challenging contexts. Under current circumstances, Myanmar faces a high potential for resource-driven conflicts unless local communities, civil society and the private sector are supported to identify and mitigate the root causes of conflicts driven by resource competition or exploitation.

24. **Recommendation 4:** Sustaining natural resource conservation in Myanmar under current political instability.
- i. Strengthening governance and legal frameworks: Support and efforts to ensure clear legal frameworks continue to be acknowledged at community level is necessary. NGOs/CSOs and private sector actors could be a conduit for supporting and continuing implementation of legal frameworks and positive policies prior to 2021. International development partners such as the UN-REDD can play this role effectively as demonstrated by the TA.
 - ii. Development partners can promote transparency and accountability by supporting and implementing mechanisms to increase transparency in resource management and hold those exploiting resources illegally accountable. The TA in Myanmar produced important social and environmental safeguard guidelines and resource monitoring tools based on remote sensing that are useful for NGOs/CSOs. These tools can continue to be funded to ensure established systems for monitoring environmental changes and resource use are maintained and shared with local NGOs and international organizations to improve resource management and response strategies.
 - iii. Sustained support for engagement with local communities promoting inclusive participation and involve local communities in decision-making processes regarding the management and protection of natural resources will increase voluntary stewardship for resource protection. This can be complemented by designing resource management strategies that are sensitive to local conflicts and power dynamics.
 - iv. Through community empowerment and education, local communities will become more aware of the value of sustaining, managing, and protecting their local environment. The support towards capacity building for sustainable livelihoods, CFEs offers alternatives that reduce dependence on resource exploitation and enhance economic diversification. Encouraging economic diversification reduces the reliance on natural resources for economic stability. UN Agencies can promote environmental diplomacy by engaging and encourage regional cooperation and dialogue on transboundary natural resource management. In this instance, engaging with the other ASEAN would require the UN-REDD to continue implementing multi-country programs such as this TA and include Myanmar.
 - v. The ongoing humanitarian response efforts can integrate environmental considerations by conducting environmental impact assessments for humanitarian aid projects to avoid unintended harm to natural resources.

1 INTRODUCTION

25. The primary audience for this final evaluation of the TA are the three UN agencies (UNDP, FAO, and UNEP), the UN-REDD Secretariat implementing partners and NICFI. Following the coup in February 2021, the UNCT engagement guidelines in Myanmar changed and the TA project activities also changed. This evaluation therefore covers the original project design and the changes that were made. This report is divided into four sections. The first section provides a description of the project, outputs, and sub-activities. The section then describes the scope of the evaluation and the methodology that was agreed and presented in an inception report submitted in March 2024.
26. Section 2 provides a detailed account of the evaluation findings covering an assessment of project design and output relevance, effectiveness and efficiency of project implementation and achievements. The section also assesses how gender and social inclusion and how conflict sensitivity was included in the project design and implementation. The section then discusses the sustainability of project design and outputs and concludes by discussing the potential impact.
27. Section 3 looks at aspects of project implementation, institutional setting, and adaptive management.
28. Section 4 provides conclusions and recommendations followed by lessons learned.

1.1 Description of the UN-REDD Technical Assistance

29. The UN-REDD Mangroves TA (hereafter referred to as the TA) was implemented to support Myanmar in reducing its emissions as well as enhancing livelihoods of mangrove communities in six districts (covering 56% of national mangrove cover) in Ayeyarwady, Mon, Rakhine and Tanintharyi. The overall goal of the project was to support sustainable management, restoration, and conservation of mangroves ecosystems to contribute to the achievement of the overall goals of the National REDD+ Strategy (NRS), in terms of emissions reductions and enhanced livelihoods of local communities. UNDP therefore requested an evaluation to assess whether the project achieved the goal.
30. The project was designed with four outputs, namely (i) Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms, (ii) Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change, (iii) Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national climate change mitigation goals, and (iv) Operational models of community-led management of land and forests.
31. Mangroves are among the most productive ecosystems in the world. Their high rates of net primary productivity deliver significant ecosystem goods and benefits to society, including support to coastal fisheries, shoreline stabilization, timber and non-timber forest products, protection from coastal storms, storm surges and tsunami, and sequestration of carbon dioxide. Myanmar is one of the mangroves-richest countries in the world and contains an estimated 4% of the world's mangroves and 8.8% of the mangroves found in Southeast Asia. With about 500,000 hectares of mangroves along its 2832 km coastline along the Bay of Bengal and the Andaman, Myanmar has the largest area of mangroves in Asia after Indonesia and Malaysia. Because of its great latitudinal range and ecological diversity, Myanmar is also home to 34 of the world's 75 "true" mangrove species, a very high proportion and second only to Indonesia in Asia.
32. Mangrove forests in Myanmar are undergoing tremendous pressures both from anthropogenic and from natural disturbances, resulting in high rates of deforestation and mangrove degradation. Recent analysis shows that the main drivers of mangrove deforestation are conversion to rice paddies, charcoal production, and aquaculture for shrimp farming although extreme weather events, such as Cyclone Nargis in 2008, have also contributed to losses. A recent study (De Alban, Jamaludin, Wong de Wen, Then, & Webb, 2020) estimated a total of 13,233 km² of mangroves across Myanmar in 1996, with more than 90% occurring in the regions of Ayeyarwady, Rakhine, and Tanintharyi. The study estimated a total net mangrove cover declined by 52% over 20 years, from 13,233 km² in 1996 to 8907 km² in 2007 to 6,287 km² in 2016.
33. Mangroves are considered valuable resource for climate change mitigation and REDD+ implementation in Myanmar. As a result, the role of mangroves underpins some of the Policies and Measures (PAMs) outlined in Myanmar's National REDD+ Strategy. It is with this context that the Norway International Climate Forest

Initiative (NICFI) favorably viewed the Myanmar component as technically strong and therefore requested UN-REDD Programme to submit a proposal which was subsequently approved in June 2020 for a budget estimate of US\$2,013,443 for a two-year programme.

34. The roles of each UN agencies and partner were clearly defined for each activity. In general, each UN-REDD agency focused on normative areas of expertise and enlisted the services of several local NGOs and CSOs described in Table 1-1.

Table 1-1 List of implementing partners

Name	Description and role
Myanmar Environment Rehabilitation-conservation Network (MERN).	MERN is a national network of local and regional NGOs with an environmental focus consisting of 29 NGO members with a range of experience ranging from forestry and environmental policy development to community improvement, capacity building, social mobilization, agriculture, livestock, fisheries, as well as social infrastructure projects. MERN was contracted to prepare and provide capacity building to key Community Forestry groups in the country, and to pilot the use of selected safeguards checklists, to support the Development of Community Forest-based Enterprises in Mon State and Tanintharyi Region
Community and Environmental Development Association (CEDA)	CEDA focuses on environmental conservation and capacity building, field study and research activities, community development and disaster risk reduction, environmental rights, and humanitarian assistance to vulnerable communities and marginalised population groups. CEDA was contracted to support Mapping and Assessment of Community Forests in Kyaukphyu District, Rakhine State
Ecosystem Conservation and Community Development Initiative (ECCDI)	ECCDI is a non-political, non-profit, and non-governmental organization and provides a range of expertise in environment, ecosystem management, forestry, wildlife, agriculture, livestock, and community development. ECCDI was contracted to support data collection in the Delta region.
Centre for Development and Environment (CDE)	With its expertise in land governance and land administration reform, customary land tenure and community land rights, community based natural resource management CDE was a useful partner for assessment of Community Forestry effectiveness and mapping in both Rakhine and Tanintharyi. The mapping and assessment methodologies were developed with technical support from RECOFT (the regional community forestry center) which were shared with local actors in Yangon and Mekong region countries in Bangkok. The initiative also produced improved CF maps in two mangrove districts (Myeik, Kyaukphyu). At the time of this evaluation the report had been drafted awaiting finalization.
Green Network Tanintharyi Region (GNTRM)	Green Network Tanintharyi Region (GNTRM) is a local civil society organization and key areas of work include monitoring extractive industries transparency initiative (EITI), preserving mangrove forests, and raising awareness about community forest (CF) establishment. GNTRM was contracted to support Mapping and Assessment of Community Forests in Myeik District, Tanintharyi Region
Advancing Life and Regenerating Motherland (ALARM)	Advancing Life and Regenerating Motherland (ALARM) is a non-profit organization, and its mission is to catalyse democratic change and sustainable development by integrating climate change, environmental justice, and governance into existing policies and institutions for natural resource management. ALARM was contracted to support the Community Protected Areas (CPA) Development in Mon State and Tanintharyi Region
Mon Social Development Network (M)	The Mon Social Development Network (MSDN) is an organization that focuses on social cohesion and community development in the Mon region of Myanmar. The MSDN aims to strengthen communities by promoting social cohesion, understanding identity, addressing stereotypes, and fostering peace. MSDN was contracted via MERN to support the Development of Community Forest-based Enterprises in Mon State.

1.2 Evaluation Objectives, and Scope

35. The original results framework is presented in Table 1-2 and the revised results framework in Table 1-3. The original project design had government agencies as a partner, but this changed following the coup and the review of the UN engagement in Myanmar.

36. The overall objective of the assignment is to assess the achievements of the project’s objectives and outputs as specified in the project document, and its subsequent revisions. The specific objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can improve the sustainability of benefits from the project and produce recommendations that can inform actors and donors in supporting and designing future mangrove conservation programs and REDD+ implementation in Myanmar and other countries.
37. The scope of the evaluation covers the period since the project was commissioned in 2020 up to June 2024. This period includes three no-cost extension periods from the initial closure date of 24 August 2022. The first extension request was for four months until 31 December 2022; the second extension being longer till 31 December 2023, and the third extension till June 2024. Because of the coup, some activities were discontinued while other activities were adjusted based on a comprehensive risk-based analysis undertaken in April 2021.

Table 1-2 Original Project Activities

1. Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms support more effective conservation, restoration, and sustainable management of mangroves	1.1. Operationalizing an enhanced legal and policy framework	UNDP
	1.2. Organizational coordination enhanced	UNDP
	1.3. Support to safeguards coordination and implementation	UNEP
2. Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change along coastal areas of Myanmar	2.1. Develop emission/removal factors	FAO
	2.2. Resource mapping and monitoring	FAO
	2.3. Carbon accounting and monitoring of carbon emissions/removals for Myanmar’s Mangrove areas	FAO
	2.4. Compile and analyze data on selected mangrove values	UNEP
3. Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national CC mitigation goals	3.1. – 3.2. Revise and support implementation of District Forest Management planning in Delta Region and SE Myanmar	FAO / UNDP
	3.3. – 3.4. Develop participatory integrated land use plans in the Delta Region and SE Myanmar	FAO / UNDP
	3.5. Ensure that planning and implementation of DFMPs and LUPs adhere to FPIC principles and proactive stakeholder engagement approaches that are aligned with national safeguards framework	UNDP
4. Operational models of community-led management of land and forests (Unfunded)	4.1: Strengthening local communities’ capacity for managing community conservation areas	UNDP
	4.2 and 4.3: Community Forests and Community Forest Enterprises established in Delta Region and SE Myanmar	FAO / UNDP
	4.4. Promoting sustainable /integrated mangrove-shrimp farming practices	FAO
	4.5. New mangrove plantations /restored mangroves	FAO
Project (TA) Management, Knowledge Management & Communications		UNDP

Table 1-3 Revised project activities

Activity by activity considerations on possibility to continue / need to halt or re-programme			
Output	Activity	Continue or Not	Proposed adjustment to the activity in the current circumstances
1. Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms support more effective conservation, restoration, and sustainable management of mangroves	1.1. Operationalizing an enhanced legal and policy framework	No	None - allocated funds proposed to be used for other activities
	1.2. Organizational coordination enhanced	No	None - allocated funds proposed to be used for other activities
	1.3. Support to safeguards coordination and implementation	Yes	Development of generic guidance; capacity development of non-government actors.
2. Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change along coastal areas of Myanmar	2.1. Develop emission/removal factors	Yes	Limit to the analysis of existing data
	2.2. Resource mapping and monitoring	Yes	Development of methodologies for mapping mangroves ecosystem
	2.3. Carbon accounting and monitoring of carbon emissions/removals for Myanmar's Mangrove areas	Yes	Development of preliminary methodology
	2.4. Compile and analyse data on selected mangrove values	Yes	Remote desk-based analysis
3. Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national CC mitigation goals	3.1. – 3.2. Revise and support implementation of District Forest Management planning in Delta Region and SE Myanmar	No	None - allocated funds proposed to be used for other activities
	3.3. Develop participatory integrated land use plans in the Delta Region	No	None - allocated funds proposed to be used for other activities
	3.4. Develop participatory integrated land use plans in SE Myanmar	Yes	Development of REDD+ Action Plans for Karen National Union and New Mon State Party
	3.5. Ensure that planning and implementation of DFMPs and LUPs adhere to FPIC principles and proactive stakeholder engagement approaches that are aligned with national safeguards framework	Yes	Development of Community Forestry Instructions for New Mon State Party
4. Operational models of community-led management of land and forests	4.1: Strengthening local communities' capacity for managing community conservation areas	Proposed as alternative (not included in first phase of funds approved by Norway)	Capacity building for local communities and CSOs for the establishment of Community Protected Areas

	4.2 and 4.3: Community Forests and Community Forest Enterprises established in Delta Region and SE Myanmar	Proposed as alternative (not included in first phase of funds approved by Norway)	Capacity building for local communities and CSOs for the establishment of Community Forests and Community Forest Enterprises
	4.4. Promoting sustainable/integrated mangrove-shrimp farming practices	(not included in first phase of funds approved by Norway)	
	4.5. New mangrove plantations/restored mangroves	(not included in first phase of funds approved by Norway)	
Project Management, Knowledge Management & Communications (TA)		Yes	Awareness raising on mangroves targeted at local communities, CSOs and private sector. Sharing Myanmar's mangroves' experiences with other countries

1.3 Methodology of the evaluation

38. This section summarizes the evaluation methodology which was presented in the inception report. The evaluation was requested by UNDP as the convening agency therefore the methodology follows UNDP evaluation guidelines in line with additional discussions relating to the security situation in the country. The evaluation was conducted according to the guidance, rules and procedures established by UNDP and adhere to the UN Evaluation Group's Norms and Standards¹ including the guidance on Integrating Human Rights and Gender Responsive Evaluation². In addition, the ToR required that the evaluation also utilize the Organization for Economic Co-operation and Development's Development Assistance Committee (OECD DAC) criteria (assessing relevance, effectiveness, efficiency, and sustainability). On 16 January 2024, a pre-mission virtual call was held with the UNDP during which a presentation was given on the project overview and implementation status and an overview of the security situation prior to any field visits. In assessing the TA relevance, the ET considered the role of each UN agency within the UN-REDD Global programme and coherence with their respective country strategy frameworks – which of course changed drastically following the coup.
39. The ToR required the evaluation to assess project performance against expectations set out in the Project description which provides performance and impact indicators for project implementation along with their corresponding means of verification. To achieve this, the ET used a series of evaluative questions under four broad categories presented in Annex 3. This evaluation matrix was used to assess the project Results Framework presented in Annex 4.
40. In following the prescribed approach, the ET used a participatory approach working closely with the project team, first to identify all key stakeholders to participate in the evaluation, followed by preparation of a detailed schedule. This approach was necessary because of two main factors. The project produced a large volume of outputs in the form of documents, guidelines, training materials and technical reports as well as data which are all part of the stated outputs. Part of the evaluation was to confirm if the outputs were produced, which is a largely qualitative process. A qualitative assessment was carried out on data related to participation in workshops, consultations, and trainings. A detailed review of project documents, annual work-plans, and project progress reports included assessing information reported against the results framework, government strategy and policy documents, and cross-triangulating through interviews with stakeholders. Interviews were held with UNDP CO, the Interagency Working Group comprising FAO, UNDP,

¹ UNEG Norms & Standards: <http://uneval.org/normsandstandards>

² <https://unevaluation.org/document/detail/1616>

and UNEP, implementing partners and beneficiaries from project locations listed in Table 1-4. A list of individuals interviewed is provided in Annex 1, but this list excludes names of individuals interviewed in the villages visited by the National Consultant for security reasons. The ET held meetings with Project Management Unit (PMU) to better understand and analyze the politically risky context in which the project operated.

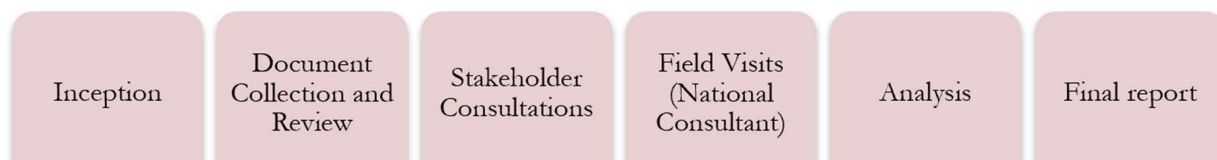
41. The selection of sample communities visited was non-statistical and was largely determined by security and access factors. There is a potential for bias from this approach, but the ET is confident that the combination of data in project documents, reports, and feedback from all stakeholders allowed the evaluation to capture key information. For instance, the evaluation assessed the list of documents, reports, guidance materials produced, relevance of the outputs, and confirmed the quality of the products through discussions with the PMU and regional technical advisors from the UN-REDD agencies.

Table 1-4 List of villages visited

	Village Name	Township	Travel destination via	Functional	Activities	Visited date	Certified
1	Htan Pin Chaung Gyi_CF	Paung	Mawlamyine	Yes	CF	8 Apr 24	NA
2	Karttay 2_CFE	Paung	Mawlamyine	No	CFE	8 Apr 24	NA
3	Thel Gone_CPA	Paung	Mawlamyine	Yes	CPA	9 Apr 24	Partially as CF
4	Tein Chaung CFE	Kyunsu	Myeik	Yes	CFE	23 Apr 24	CF already exists
5	Lake Kyal CFE	Kyunsu	Myeik	Yes	CFE	23 Apr 24	CF already exists
6	Tee Pu_CFE	Kyunsu	Myeik	Yes	CFE	23 Apr 24	CF already exists
7	Taw Htwin Gyi_CFE	Myeik	Myeik	Yes	CFE	24 Apr 24	CF already exists
8	Bo Taung_CPA	Kyunsu	Myeik	Yes	CPA	25 Apr 24	Proposed CPA
9	Maw Yut_CPA	Kyunsu	Myeik	Yes	CPA	25 Apr 24	Proposed CPA

42. In terms of the evaluation process, the ET followed the accepted proposal described in the inception report and summarized in Figure 1-1 below with the full diagram in Annex 6.

Figure 1-1 Evaluation process flow³



1.4 Limitations

43. There were some limitations in conducting this evaluation. The international consultant could not travel to Myanmar due to the security restrictions and therefore could not participate in the discussions with communities. To mitigate this limitation, the team had constant communication to share feedback from the

³ Full diagram in Annex 6

communities. Although the national consultant was able to visit some communities, the level of engagement was somewhat limited as meetings could not be held openly with larger groups hence focus group discussions could not be adequately conducted especially to observe and discuss issues such as gender and participation of women. To overcome some of these limitations, discrete meetings were held with a small number of community members where data was collected on the type of activity and benefits received. The data was later triangulated and confirmed with data from documents such as attendance lists from training workshops, and consultations. The small number of community members met during the visit were able to freely express their views and this enabled the ET to draw meaningful conclusions on relevance, effectiveness, and sustainability of interventions.

44. The ET had access to a large volume of documents produced by the project. For the security of both individuals and partners organization, the ET was briefed on maintaining strict confidentiality hence some micro data could not be published. In such cases the ET only assessed the high-level information provided in project reports.
45. Government institutions were not interviewed for this evaluation therefore all aspects about the relevance of the project in relation to government priorities were based on analyzing existing and publicly available documents and through interviews of implementing partners and UN-REDD agencies.

2 MAIN FINDINGS, RESULTS AND CONTRIBUTION TO STATED OBJECTIVES

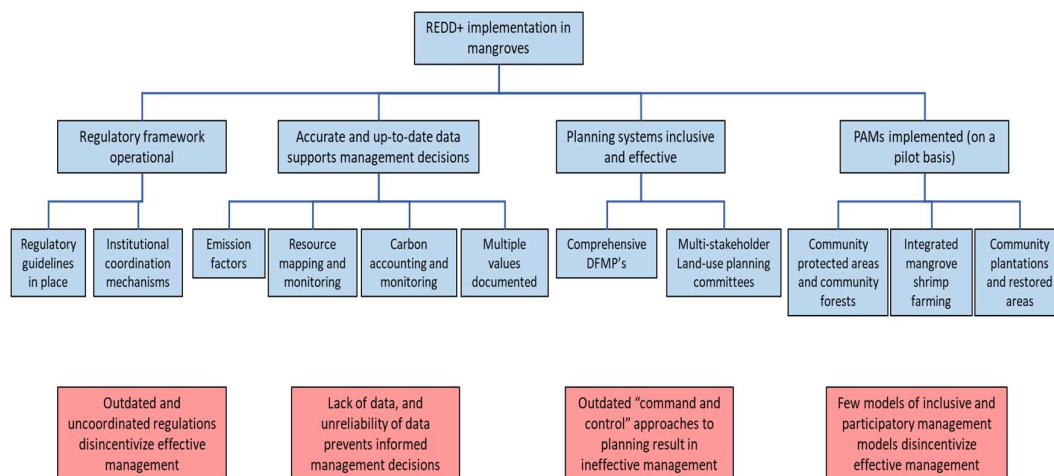
2.1 Relevance of Design

46. The UN-REDD Global Technical Assistance program provides targeted support and expertise to countries engaged in REDD+ activities. This assistance aims to enhance their capacities in various thematic areas critical to the successful implementation of REDD+ strategies. The Myanmar TA was part of the global program and hence relevant to UNDP, FAO, and UNEP as it provided support for developing and implementing their national REDD+ strategies and action plans. The four outputs were designed to support Myanmar with guidance on the design of REDD+ frameworks through supporting areas such as forest governance, legal frameworks, and stakeholder engagement. The TA was coherent with country needs and objectives of REDD+ architecture with regards to social and environmental safeguards, multiple benefits, National Forest Monitoring Systems (NFMS), and financial mechanisms and incentives, including performance-based payments and benefit-sharing arrangements.
47. The project design is sound and based on extensive background analysis of the national circumstances and the original set of interventions clearly contributed to the capacity of Myanmar to transition from REDD+ readiness to implementation. The project design complemented existing country programmes of UNDP, FAO and UNEP. During project formulation, consultations were held with the major mangrove-related initiatives including support by DANIDA, UNDP (with LDCF funding), FAO (with GEF funding and Government of Finland NFMIS/NFI project), and the Global Swedish International development Agency (SIDA) Programme. The SIDA programme focused on strengthening UNDP Myanmar capacities to improve governance of natural resources and mainstream climate change considerations through integrated policy advocacy and programmes and rigorous application of social and environmental safeguards. This consultation ensured that the activities and approaches were compatible, complementary, and coherent with the objectives for supporting Myanmar to meet its SDGs – especially SDG 13, 15 and 16.
48. The selected activities were in line with barriers identified in the NRS such as the lack of modern, effective regulations governing mangrove management, lack of coordination among institutions, lack of accurate and adequate data to inform management decisions, lack of inclusive and participatory planning mechanisms, and lack of models of effective management.
49. The changes applied to the TA following the coup were practical and logical given the opportunity to work with government institutions was no longer possible. Partnering with MERN, CDE and local CSOs enabled continuation of community-centered support. Myanmar, like most developing countries, needs capacity for implementing REDD+ especially in government institutions. The absence of engagement with government left a major gap. The government institutions that were intended to implement the TA activities included Forest Department at national and sub-national levels, National REDD+ bodies including technical working groups, National Coastal Resources Management Committee (NCRMC) and sub-national committees. The NCRMC is comprised of the Ministry of Natural Resources and Environmental Conservation, Ministry of Agriculture, Livestock and Irrigation, the General Administration Department, and the National Land Use Council.
50. Partnering with the NGOs and CSOs mitigated the significant limitations resulting from the coup. In particular, the partnerships allowed the UN-REDD agencies to implement interventions which would have not been possible without the partnerships. However, although the partnership with the NGOs and CSOs mitigated the limitations resulting from the coup, it is unlikely to be sustainable unless there is ongoing financial support.
51. The TA design did incorporate a conflict-sensitive approach and the design considered the differentiated role of women and men. A regional gender analysis covering coastal and marine resources management (including of Myanmar) was carried out and provided guidance in the TA formulation ensuring gender equality and women's empowerment were effectively integrated into all TA activities.

2.2 Theory of Change Assessment

52. The use of the theory of change (ToC) is to demonstrate the causal relationships between project intervention activities or outputs. The use of the ToC at the design stage is to enable stakeholders to understand the intended impact of the project and how it will be achieved – the causal logic.
53. A ToC helps to clarify important aspects such as clarity of terminology, identification of linkages between stated outputs, intermediate states and intended impact. The design of the TA was sound and based on extensive background analysis of the national circumstances. The TA was an extension of various national and sub-national programs previously implemented by the government and other development partners. The interventions were intended to be implemented in partnership with various government agencies including with the Forest Department (FD) of the Ministry of Natural Resources and Environmental Conservation (MONREC), which held the legal responsibility for conserving, restoring, and managing all forested landscapes in Myanmar.
54. The Results Framework (Annex 4) is detailed and maps back to the ToC. The ET assessed the pre-coup and post-coup results framework and acknowledges the changes necessitated by the political situation. The original results framework had the overall objective (outcome) stated as “Sustainable management, restoration and conservation of mangroves contribute to the achievement of the overall goals of the National REDD+ Strategy”. This objective is well reflected in the ToC.
55. The indicators in the revised results framework are clear with risk and assumptions clearly stated. However, the ET notes that most indicators, baselines, and targets are qualitative rather than quantitative which suggests absence of sufficient baseline studies. Not every project must have detailed baseline studies but where qualitative indicators are used, a more detailed monitoring and evaluation framework that deliberately collects quantitative data would be beneficial. It is of course acknowledged that travel restrictions and local communities limited such essential project monitoring activities. The ET assessed the progress towards the stated impacts and noted that the achievements of the project could have led to a more pronounced impact had it not been affected by the coup which has left uncertainty around the long-term sustainability of the interventions – especially CPAs and CFEs.
56. The ET also notes that the project TOC (Figure 2-1) (sourced from the original project proposal) highlighted four barriers to effective mangrove management, including conservation, restoration, and sustainable management. The barriers are (1) a lack of modern, effective regulations governing mangrove management, combined with a lack of coordination among institutions; (2) a lack of accurate and adequate data to inform management decisions; (3) a lack of inclusive and participatory planning mechanisms; and (4) a lack of models of effective management under different circumstances. In the ToC, it would be useful if the barriers are illustrated showing the nature of relationship with intermediate states and outputs – i.e. whether the causal pathways are direct or indirect. It is always useful to show these relationships to adequately document related risks and assumptions to achieving the intended outcomes.

Figure 2-1 TA theory of change



2.3 Relevance of Outputs

57. At the broader level, the project was formulated with clear objectives and aligned to the UN-REDD Programme support to countries to reduce emissions from deforestation and forest degradation and the more immediate framework of the UN-REDD Global Technical Assistance to integrate mangroves into REDD+ implementation in Myanmar. As noted already, this TA is also a continuation of the development assistance to Myanmar in REDD+ readiness which was initiated in November 2016 with the four-year Myanmar UN-REDD National Programme. The TA was viewed as an opportunity to boost the potential of Myanmar to achieve emission reductions and enhancement of removals, as the country moves into Phase 2 (implementation) of REDD+ through the implementation of the forest and land-use actions identified in the REDD+ strategy, specifically targeted technical assistance and further strengthening of national capacities. At the state level, the National REDD+ Strategy identified gaps and barriers in national regulations, lack of reliable data, ineffective mangrove management and few models of inclusive and participatory management to incentivise community resource management stewardship through alternative livelihoods.
58. The ET reviewed the relevance prior to the coup and the changes made to the project interventions after the coup in February 2021. The outputs were and remained relevant and the changes that included discontinuing Activities 1.1 and 1.2, and 3.1 and 3.2 were logical since it was no longer possible to engage with government authorities.
59. Retaining activities related to development of safeguards guidelines and instruments was also logical and maintained the relevance of the TA activities. REDD+ implementation must ensure interventions to reduce deforestation and forest degradation, or introduction of new resource management regimes, must avoid negative social and environmental outcomes. As adopted under the UNFCCC in 2010, countries implementing REDD+ should (i) promote and support the Cancun safeguards throughout the implementation of REDD+ actions, regardless of the source and type of funding (ii) develop a system for providing information on how the Cancun safeguards are being addressed and respected (i.e. a safeguards information system, SIS); and (iii) provide summaries of information on how all of the Cancun safeguards are being addressed and respected throughout the implementation of REDD+ actions. For Myanmar to meet these requirements, capacity building is necessary and hence Output 1 (Activity 1.3) of the TA is highly relevant and provides a foundation for future safeguards implementation. Despite the uncertainty due to the political situation, the focus on capacity building and developing guidelines for safeguards directly contributes to the 2017 Myanmar REDD+ Safeguards Roadmap and aligned with the national approach to safeguards, which can be developed further in the future.
60. Under Output 2, developing methodologies for emissions accounting in mangrove has global importance given the significant presence of methane in mangroves ecosystems, a more potent greenhouse gas than carbon dioxide. For mangrove-rich countries, investing in the conservation, sustainable management and restoration of these ecosystems is low-hanging fruit towards achieving national targets for emission reductions from the forestry and land-use sector, as expressed in Nationally Determined Contributions (NDCs) to the Paris Agreement and in National REDD+ Strategies.
61. Mangroves are heavily harvested for fuel wood therefore sustainable management coupled with robust monitoring systems is necessary. Effective policy formulation and implementation requires data, hence Output 2 is particularly relevant for ensuring evidence-based policy and resource management decisions. Output 2 complements the two activities under Output 3 that were continued as demonstrating integrated land use planning and inclusive forest planning requires data. Table 2-1 summarizes the relevance of each output.

Table 2-1 Assessment of Relevance

Project Strategy	Relevance
1. Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms support more effective conservation, restoration, and sustainable management of mangroves	

1.1. Operationalizing an enhanced legal and policy framework	discontinued
1.2. Organizational coordination enhanced	discontinued
1.3. Support to safeguards coordination and implementation	Highly Relevant: REDD+ implementation requires adequate safeguards frameworks. Capacity building and development of guidance especially for non-government will be useful in the future. Safeguards approaches were tested with mangrove communities and provided an opportunity for feedback. Engagement with CSOs and NGOs provides a good foundation for future support to communities.
2. Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change along coastal areas of Myanmar	
2.1. Develop emission /removal factors	Highly Relevant: Emission factors are essential for calculating emission and removals for NDC and future emission reduction programs.
2.2. Resource mapping and monitoring	Highly Relevant: Development of methodologies for mapping mangroves ecosystem will contribute to the global mangrove monitoring as well as tracking change over time. This is a very relevant activity
2.3. Carbon accounting and monitoring of carbon emissions/ removals for Myanmar's Mangrove areas	Highly Relevant: Specific emission factors improve estimates and reduces uncertainty in carbon stock and emission and removals calculations
2.4. Compile and analyse data on selected mangrove values	Highly Relevant: Remote desk-based analysis
3. Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national CC mitigation goals	
3.1. – 3.2. Revise and support implementation of District Forest Management planning in Delta Region and SE Myanmar	discontinued
3.3. Develop participatory integrated land use plans in the Delta Region	discontinued
3.4. Develop participatory integrated land use plans in SE Myanmar	Highly relevant: Awareness raising on REDD+ with the Karen National Union (KNU) was completed. A manual for writing KNU Community Forest management plan was developed and shared with the KNU. Assessment of CF effectiveness and mapping provides a basis for future upscaling.
3.5. Ensure that planning and implementation of DFMPs and LUPs adhere to FPIC principles and proactive stakeholder engagement approaches that are aligned with national safeguards framework	Highly relevant: KNU forest policy revision was completed. New Mon State Party (NMSP) community forestry instructions development was completed.
4. Operational models of community-led management of land and forests	
4.1 Strengthening local communities' capacity for managing community conservation areas	Highly relevant: CF, CFE and CPA provide alternative livelihoods for communities therefore the capacity building and support CF Management Plans, CFE Business Plans and CPA Management Plans are essential for long-term sustainability
4.2 and 4.3: Community Forests and Community Forest Enterprises	(implemented with some of the funds from discontinued activities in Output 1 and Output 3)

established in Delta Region and SE Myanmar	
4.4. Promoting sustainable/integrated mangrove-shrimp farming practices	(not included in first phase of funds approved by Norway)
4.5. New mangrove plantations/restored mangroves	(not included in first phase of funds approved by Norway)
Project (TA) Management, Knowledge Management & Communications	Highly relevant: All projects require a budget allocation for project management and a communication strategy that promotes the outputs, achievements, and lessons from the project. A well-executed communication strategy will increase the probability for wider adoption and upscaling.

2.4 Project Achievements

62. The ET assessed the status of each component against targets and workplans reported semi-annually and annually. Under the circumstances, the PMU and project partners with support from the UNREDD agencies' regional teams made a commendable effort to deliver many outputs summarized in Table 2-2. The targets were achieved with a relatively high degree of effectiveness, but it is somewhat unrealistic to rate efficiency due to the high degree of uncertainty and inability to directly engage the de facto government and the limited access to communities. For instance, while the CSOs and NGOs could hold gatherings, they were limited to small groups meaning more workshops, trainings, and consultations were held because of the limitation to convene large groups.

Table 2-2 Summary of project achievements

Output 1: Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms support more effective conservation, restoration, and sustainable management of mangroves.

Note: UNEP/UNEP-WCMC implemented the activity with in-country coordination support by UNDP.

- Activity 1.3: REDD+ Safeguards
- A guidance package on how to apply Myanmar's national safeguards approach at the subnational level, with a focus on Community Forestry, has been produced incorporating feedback from project partners and selected experts. This package includes a guidance document and a set of checklists in English and Myanmar languages, aimed at helping CSOs, NGOs and other civil society REDD+ planners and implementers to plan, design and implement socially and environmentally sustainable REDD+ actions in line with the safeguards. The guidance package has been translated into Myanmar language.
 - A ToT was organized with a key NGO implementing partner in November 2022, to assist the partner (MERN), prepare for providing similar capacity building to key Community Forestry groups in the country, and to pilot the use of selected safeguards checklists. MERN piloted the checklists with select CFs in Ayeyarwady.
 - Several key project outputs (such as the manual on CF management plans and the CPA management plan guidelines) were also reviewed from a safeguards perspective.

Output 2: Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change along coastal areas of Myanmar. (Note: Implemented by FAO and UNEP/UNEP-WCMC with in-country coordination support by UNDP).

- Activity 2.1: emission/removal factors
- Field data from Mangroves clusters (286 clusters) of the Myanmar National Forest Inventory were analyzed to yield improved EF estimates for the Mangroves biome.
 - [A technical report](#) on Subnational Forest Reference Emission Level for Mangrove Forests: An Opportunity for Jurisdictional or Biome-wise REDD+ Implementation in Myanmar
 - [A technical report on National Forest Inventory in Myanmar Mangroves](#)

<p>Activity 2.2: Mangrove classification maps for Ayeyarwady and Tanintharyi regions</p>	<ul style="list-style-type: none"> The mangrove extent maps of Ayeyarwady and Tanintharyi regions were classified in level of maturity and canopy coverage. For this, information extracted from time series of optical and radar satellite data were used in combination with training samples. These were collected by national experts through visual interpretation of very high-resolution satellite images and the support of the National Forest Inventory data. A methodology was developed for near-real time forest monitoring and the methodology was shared during a training with conservation CSO/NGOs and practitioners in Yangon. (https://www.un-redd.org/satellite-monitoring-system-myanmar-mangroves)
<p>Activity 2.4: Mangrove ecosystem services</p>	<ul style="list-style-type: none"> A scoping process was carried out, detailing key issues, available global and national data and proposed analyses on mangrove ecosystem services, biodiversity, and values, with a focus on mapping. Consequently, a scoping paper was prepared, shared for feedback with project partners and stakeholders, finalized and published on the UN-REDD web site. A series of webinars/capacity building sessions with Myanmar NGOs on spatial analysis of ecosystem services (as well as changes in mangroves) including a case study on economic information/costs & benefits of action in mangroves, as well as tutorials/training materials provided A series of maps and a web story / story map on the importance and services of mangroves were developed, utilizing the spatial and economic information.
<p>Output 3: Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national CC mitigation goals. (Implemented by UNDP)</p>	
<p>Activity 3.4: Sub-national REDD+ Action Plans for Non-State Actors, community forests (CF) assessment and mapping</p>	<ul style="list-style-type: none"> Awareness raising on REDD+ with the Karen National Union (KNU) was completed. A manual for writing KNU Community Forest management plan was developed and shared with the KNU. Assessment of CF effectiveness and mapping in both Rakhine and Tanintharyi were completed. The mapping and assessment methodologies were developed with technical support from RECOFT (the regional community forestry center) which were shared with local actors in Yangon and Mekong region countries in Bangkok. The initiative also produced improved CF maps in two mangrove districts (Myeik, Kyaukphyu). At the time of this evaluation the report had been drafted awaiting finalization. This activity was jointly undertaken with the Centre for Development and Environment (CDE).
<p>Activity 3.5: Community Forestry Instructions and Forest Policy for Non-State Actors</p>	<ul style="list-style-type: none"> KNU forest policy revision was completed. New Mon State Party (NMSP) community forestry instructions development was completed.
<p>Output 4: Operational models of community-led management of land and forests (Note: Implemented by FAO and UNDP)</p>	
<p>Activity 4.1, 4.2 & 4.3: Community Forests (CF), Community Forest Enterprises (CFE) and Community Protected Areas (CPA)</p>	<ul style="list-style-type: none"> All the activities related to CF, CFE and CPA in 25 mangrove communities (20 by UNDP, 5 by FAO) in the delta and southeast Myanmar were completed in December 2023. The detailed activities include socio-economic surveys, flora and fauna inventory and extensive community consultations to facilitate development of CF Management Plans, CFE Business Plans and CPA Management Plans along with Participatory Patrolling Plans. In parallel with these activities, capacity strengthening initiatives include awareness and training on importance of mangroves, mangrove management (silvicultural) practices, Market Analysis and Development (MA&D), entrepreneurial skills, basic accounting, and financial management. A series of hands-on training on

aquaculture and exchange visits were also organized to encourage community learning and networking.

- Equipment required for forestry operations including patrolling such as boats and engines, boots, measuring tapes, lifejackets and so on were provided to communities.
- To operationalize the Business Plans, an investment package (\$3000) was provided to each community to initiate Enterprises.
- A bilingual manual 'Guide for Developing Business Plan for Community Forest (Mangroves) Enterprise Development' was developed based on experience and lessons from CFE initiative in the delta and southeast Myanmar.
- A bilingual 'Guidelines for Community Protected Area Management Plan Preparation CPA' was developed.

Communication and Knowledge Management

The IWG has been working on capturing some of the key achievements through dedicated publications (UN-REDD Briefs) with the following publications. All the outputs, web stories, story maps, and resources are available at the [Mangroves TA landing page](#).

- [Review of Jurisdictional Subnational REDD+ Planning and Implementation in Asia](#)
- [A technical report on National Forest Inventory in Myanmar Mangroves](#)
- [A human-interest story](#) was developed and featured on the International Day for the Conservation of the Mangrove Ecosystems
- [A scoping paper](#): "Options for analyzing mangrove ecosystem services and biodiversity in Myanmar . The paper has been translated into Myanmar language and will be available on the website soon.
- [A story about mangrove friendly livelihood development](#)
- Final workshop held in December 2023
- [A video about indigenous people's traditional mangrove management](#)
- [a web story / story map](#) on the importance and services of mangroves
- Generic Management Plan for Mangrove Community Forest (Bilingual)
- Guidelines for Preparing Mangrove Community Forest Management Plan (Bilingual)
- A generic Terms of Reference (ToR) for Community Forest User Group for CF governance (Bilingual)
- Guide for Developing Business Plan for Community Forest (Mangroves) Enterprise Development (Bilingual)
- Guidelines for Community Protected Area Management Plan Preparation (Bilingual)
- Two workshops were organized in Yangon to share the TA's good practices and lessons learned with local actors. In addition, a final workshop in Bangkok provided Mekong countries with opportunities to learn and adopt the TA's approaches and strategies.

2.5 Effectiveness

63. The ET holds the view that the PMU and UN-REDD regional advisors were effective in adapting the implementation of the TA to the impact of the COVID-19 pandemic and the coup. The swift adjustment to the results framework and ensuring the project received the necessary extensions until completion is a significant outcome.
64. Under Output 1, safeguards guidelines were produced in both English and Myanmar languages and is available to assist CSOs and NGOs and other civil society REDD+ planners to design and implement socially and environmentally sustainable REDD+ actions. More could have been achieved, including increased capacity for safeguards had engagement with government institutions been possible.
65. For Output 2, the development of a methodology and production of mangrove classification maps which have been made available on an online platform means this information is now readily available to stakeholders and interested parties. Making the information publicly available is an effective way of sharing

although it will be essential to ensure the raw data is securely archived for future access when the political situation changes. Extensive spatial analysis was carried out to produce mangrove extent and mangrove condition/degradation maps for two regions. The methodological approach will be applied to other regions in Myanmar and can prove useful in mangroves areas elsewhere. In addition, a scoping report has been prepared to identify the priorities, data sources and options for proposed analyses that can support the integration of mangroves sustainable management, restoration, and conservation into REDD+ implementation in Myanmar. The project has produced four tutorials (two tutorials by FAO covering mapping mangroves and monitoring their condition using the CCDC algorithm in SEPAL; and two tutorials by UNEP-WCMC on introduction to QGIS, and on using the InVEST Coastal Vulnerability model to map the importance of mangroves for reducing coastal vulnerability.

66. Under Output 3, an earlier plan to develop sub-national REDD+ action plans were replaced with raising awareness on REDD+ with the Karen National Union (KNU) as well as developing a manual to write community forest management plans for the KNU and revision of its Forest Policy. Under Output 4, the support to CFs, CFE and CPA was particularly effective because of the training in forest inventory, mangrove conservation to drafting management or business plans. Some communities have continued forest protection activities on their own accord.

2.6 Social and environmental safeguards

67. Each of the UN-REDD agencies has internal safeguards frameworks that are to be applied during project implementation. FAO's Framework for Environmental and Social Management (FESM)⁴ establishes environmental and social performance requirements for FAO programming. The FESM includes key elements of a human rights-based approach with the goal of ensuring that people and the environment are protected from any potential adverse impacts of FAO programs and projects. The UNEP's Environmental and Social Sustainability (ESS) Framework has eight safeguard standards including biodiversity, climate change, pollution, health and safety, cultural heritage, indigenous peoples, and others, backed as well by the guiding principles of 'leaving no one behind', human rights and gender equality, sustainability, resilience, and accountability. UNDP has a comprehensive Social and Environmental Standards (SES) framework which underpins its commitment to mainstreaming social and environmental sustainability at Programme and Project level. The SES are an integral component of UNDP's quality assurance and risk management approach to programming. Internal reporting for the three agencies requires explicit monitoring and reporting on gender and social and environmental impacts of projects and programs.
68. Given the participation of NGOs and CSOs in implementation safeguards compliance by partners was ensured through contractual conditions, supervision and support, and regular coordination meetings by the PMU and IWG. At the community level, capacity building activities were designed in a manner that ensured compliance with UN guidelines.

2.7 Gender, social, and disability inclusion

69. Due to travel and security limitations, the evaluation was not able to gather sufficient data during community visits. The gender analysis has therefore largely relied on project documents by analyzing participation rates by women in activities such as training workshops, webinars, and consultations. Early project analysis reports highlighted that various gender inequalities exist within the specific case of Myanmar forestry sector often because of customary practices and gender norms. It is reported that patriarchal social norms are common within the family and community, with men mostly acting as the decision-makers. In addition, the forestry sector is still governed by social norms that reinforce forestry as a male-dominant profession in which women's rights are seen as secondary. In the case of ownership of forested land and forest resources, administrative and institutional frameworks are oftentimes not clear and as a result, women's rights to own and access land and forest resources are generally ignored. This is

⁴ <https://openknowledge.fao.org/items/bd31df36-ea02-4565-976c-972d1ad44ac1>

compounded by a lack of gender-disaggregated data and limited research on gender differentiated rights and women's knowledge and contributions to sustainable forest management practices within the country.

70. In Myanmar, similar to neighboring countries, there is differentiated use and management of forests among women and men. Women often gather firewood from forests as well as collect forest products, such as mushrooms, wild fruits, nuts, wild vegetables, and medicinal herbs. Men, on the other hand, often hunt wild animals and cut logs and bamboo, and are involved in the sale and export of timber. While men dominate the timber industry, women are still involved in the sector as collectors, producers, and users of non-timber forest products, such as bamboo and rattan, mushrooms, nuts, and medicinal plants.
71. To the extent possible, the project outputs contributed to women's empowerment and mainstreaming of gender sensitivity and social inclusiveness. ET observations within the communities are that the project did provide the opportunities and options for empowering women in decision-making, as well as ensuring women's roles and interests in resource use and conservation are catered for. Women are included in workshops and trainings and various committees of CF/CFE/CPA, and the project enabled women to access information and promoted the notion that natural resources management is not gender biased.
72. In the annual report for 2022, it is indicated that significant resources were channeled towards social inclusion, reorienting part of the planned actions specifically towards strengthening capacities of local communities. Overall, over twenty communities benefitted from training and capacity development programs and awareness initiatives related to CF, CFE and CPA. In addition, the safeguards guidance package specifically addresses issues of gender, social inclusion, and participation. Data on gender was also collected during consultation visits to project sites by implementing partners. However, the cited data seems to suggest that the participation of women in events is low.
73. For instance, the spatial analysis webinar series had a total of 172 participants with 60 women and the introductory training with Community Forestry User Groups (CFUGs) on safeguards held in November 2022 was attended by 36 participants (31 men, 5 women) from CFUGs, project staff and observers from CSOs. A webinar on "REDD+ Safeguards in Community Forestry in Myanmar" was held in June 2023 was attended by 33 participants including twelve women. Project partners need to continue to encourage the participation of more women and perhaps holding women-focused seminars and workshops.
74. The project design did not have specific text related to disability inclusion. However, as outlined in the safeguards section, the three UN-REDD agencies each have strong safeguards frameworks for project implementation, and each includes an institutional-wide approach guided by the UN Disability Inclusion Strategy. The strategy enables the UN system to support the implementation of the [Convention on the Rights of Persons with Disabilities](#) and other international human rights instruments, as well as the achievement of the SDGs, the [Agenda for Humanity](#) and the [Sendai Framework for Disaster Risk Reduction](#). Given the nature of the political situation in Myanmar, the ET encourages the UN-REDD agencies to be explicit in program formulation as well as to ensure monitoring and evaluation systems collect such disaggregated data for reporting purpose. However, for this evaluation, no negative impact or exclusion of persons with disability were identified. The TA supported capacity building for safeguards implementation as well as feedback and grievance redress mechanism through a series of guidelines and checklists. This support provided an inherent means by which community members could provide feedback if interventions impacted them negatively.

2.8 Conflict Sensitivity

75. Conflict can have profound and multifaceted impacts on environmental conservation, often exacerbating existing environmental problems and creating new challenges. The project document outlines measures on how conflict-sensitivities were to be treated during implementation. For instance, it is noted that during the TA proposal formulation, discussions were held highlighting how the project would synergize and benefit from the package of safeguard instruments under the NFMS/NFI Project field operations framework of a human rights-based approach, and with conflict-sensitivity and do-no-harm strategies.
76. During this evaluation, discussions with the NGOs and CSO partners confirmed the importance of recognizing that development projects and activities must be sensitive to the dynamics of the conflicts that have occurred or are ongoing between and among ethnic and/or socio-economic groups. The UN-REDD has

tools to guide and track its gender-responsiveness such as the [Checklist for Gender-Responsive Workshops](#) and the [UN-REDD Gender Marker Rating System](#)

77. It is noted that in Myanmar, the state is the ultimate owner of all the land and natural resources above and below the ground, above and beneath the waters and the atmosphere within its territorial boundaries. The ET was informed that under this overarching legal context, smallholder farmers whose land use rights are not adequately protected, may lose access to land that they have been productively using and rely on for their livelihoods. This makes the development of safeguards guidelines particularly important to ensure those ethnic or socio-economic groups that are marginalized are protected.
78. The conflict situation is particularly concerning for many ethnic women who make a living by selling forest products and are primary users and managers of the forests. Ethnic women are also engaged in various forest activities, such as establishing nurseries for plantations; selecting seedlings and tree species; replanting timber trees; practicing controlled burning for assisting regeneration; and protecting germinating seedlings and new saplings among other activities and have thus contributed to the prevention of forest degradation. It is there necessary that measures continue to be in place and supported to protect women and allow continuation of livelihood activities. This is perhaps one of the critical reasons why continued engagement with local partners is necessary.

2.9 Sustainability

79. Under the uncertainty of the political situation in Myanmar, it is commendable that the UN-REDD persisted with the implementation of the TA activities and took major adaptive management measures to work with NGOs and CSOs to reach communities. The ET agrees that the TA work with local organizations, provided a way to increase awareness on the intrinsic value of mangrove forests and preserve habitats. The partnerships provide a promising setting for sustained stewardship by local communities. Some of the products and outputs are easier to sustain while others will require additional support. The safeguards guidance package can be available in the long-term if the material is accessible on online platform such as adding the UN-REDD website. However, the capacity for implementation can diminish unless there is sustained support for NGOs and CSOs to continue working with communities, including frequent monitoring, and reporting and continue providing capacity building to Community Forestry Groups. MERN piloted the safeguards checklist with a small selection of CFs in Ayeyarwaddy. More funding would be needed for upscaling beyond the pilot communities.
80. Data and emission factors generated under Output 2 as well as the technical reports and methods will be useful and applicable for future work. The secure storage of these outputs is essential too. However, given that the mangrove specific data was collected only from 286 clusters, further support could enable increasing the number of clusters as well as funding future mangrove specific inventories and updating mangrove classification maps.
81. With Myanmar being recognized as having one of the most extensive mangrove areas in the world and suffering from the highest rates of mangrove deforestation, it only makes sense that measures are taken to protect this important ecosystem. As a fragile and conflict affected country, Myanmar is confronted with major development challenges, which threatens efforts to end extreme poverty and produce a more equitable future. Natural resources in Myanmar face the threat of complete destruction due to a breakdown in the rule of law, absence of environmental law enforcement and lack of governance. This situation is exacerbated by climate variability which disrupts production systems, leading to food insecurity, malnutrition, and increased social tensions. Environmental degradation trajectories, such as deforestation, loss of soil fertility and erosion, and pollution can ignite violent conflict over natural resources. Such dynamics can intensify resource competition, particularly for water and arable land, causing conflicts between groups. Climate-induced migration and displacement put pressure on natural resources, driving resource scarcity and fueling social tensions.
82. It is therefore important to note that for a country such as Myanmar, which is in a state of chronic fragility and conflict, the rate of natural resource depletion will increase without sustained support. While it must be acknowledged that there is no easy solution, the model applied by the TA to partner with local NGOs and CSOs to deliver support and build capacity for mangrove management offers hope for long-term

sustainability during periods of political instability. It is also important to stress the potential downstream impact if the gains from the TA are not sustained. In post-conflict situations, socio-economic reconstruction often takes precedence over environmental conservation, potentially leading to long-term unsustainable practices and irreversible loss.

83. There are observable opportunities for sustaining the gains from the TA. Based on feedback from local communities visited during this evaluation, there is evidence that villagers understand the value of mangroves and are committed to conservation and there is evidence of empowered communities continuing to manage, conserve, and engage in sustainable business practices within the mangrove ecosystem. Communities feel they benefited from training programs in management planning, business strategy, and financial management.
84. However, unless there is a continuation of the quasi-extension services that NGOs and CSOs are providing, the motivation for mangrove management and protection may diminish. Communities independently managing CFEs and continuing conservation activities, but regular monitoring and support is necessary. As noted, conflict can have profound and multifaceted impacts on environmental conservation and Myanmar now faces direct environmental damage ranging from habitat destruction, pollution, to deforestation because of weakening of institutions leading to gaps in regulatory framework and inadequate natural resource governance. Conservation efforts have been disrupted and there is a high risk that research facilities and valuable scientific data could be lost, setting back conservation efforts by years or even decades. There is a risk of increased illegal exploitation of resources including over-exploitation of marginal and vulnerable areas such as mangroves for timber, firewood, and agriculture will result in unprecedented degradation and loss of biodiversity. There is a further significant risk that Myanmar will see a rise in poaching and illegal wildlife trade as law enforcement breaks down and rebel groups or militias exploit natural resources to fund their activities.

2.10 Impact

85. Measuring impact often requires baseline surveys and a mid-term evaluation to clearly trace results. During this evaluation it has also not been possible to carry out extensive community surveys due to restricted movement. It is also early to adequately measure the impact of the TA but there are some indicators that are important to discuss. The partnerships and engagement with NGOs and CSOs is a step in the right direction in creating effective extension services necessary to support implementation of REDD+ actions in line with safeguards. Should the political situation change for the better, there will be readily available resources such as manuals, tutorials, maps and data to support communities and the country. Similarly, capacity strengthening initiatives and training on importance of mangroves, mangrove management (silvicultural) practices, market analysis and development, entrepreneurial skills, basic accounting, and financial management have left communities feeling empowered. The series of hands-on training on aquaculture and exchange visits have been instrumental in encouraging community learning and networking.

3 IMPLEMENTATION

3.1 Programme Management and stakeholder engagement

86. At the design stage, the TA support to Myanmar was under the umbrella of the UN-REDD Programme Global Technical Assistance (TA) – Asia component, hence came under the Administrative agent services of the UN-REDD Multi-Partner Trust Fund (MPTF), and the coordination of the UN-REDD Secretariat in Geneva. Operational and financial oversight fell under the responsibility of the implementing UN agencies.
87. Following the coup in February 2021, Project Boards were dissolved as per the United Nations Country Team (UNCT) engagement guidelines. The TA was therefore implementing by a Programme Management Unit (PMU) with team members that had contributed to the Myanmar UN-REDD National Programme which terminated in September 2020. The PMU was established under the UNDP budget and implementation arrangements were consolidated through a collaborative UN-REDD interagency working group (IWG), composed of FAO, UNDP, and UNEP). UN-REDD regional advisors supported all activities in the project along with technical thematic specialists from the implementing partners.
88. The ET is of the view that there was adequate adaptive and risk management. Following the coup and the COVID-19 pandemic, there was clear communication and change management driven from both the PMU and higher through the UNCT. The significant change to the project management required a more intensive risk management and mitigation approach. The TA monitoring and evaluation (M&E) occurred at country level and consolidated global level. The scope of the evaluation is limited to the country level and the ET observed that there was an adequate plan for M&E despite no engagement with the government. The results framework outlined the baseline status and targets as well as the risk and assumptions.
89. Table 3-1 summarizes the project annual expenditure for each output. As per described project reports, adjustments were following the coup with funds from Output 1 and 3 re-allocated to Output 4. Just under twenty-two percent was allocated to project and knowledge management as well as communication. All project funds have been fully utilized apart from a small amount of residual funds which have been committed to be spent. While there are no concerns about the appropriateness of budget allocation and expenditure, the ET observed that disaggregation of expenditure differs between the three UN-REDD agencies. For project implementation and enabling ease of determining efficiency, a common financial reporting format would be useful.

Table 3-1 Annual expenditure breakdown

Output	Annual Expenditure			
	2021	2022	2023	Total
Output 1: Enhanced regulatory frameworks and enhanced operational multi-stakeholder coordination platforms support more effective conservation, restoration, and sustainable management of mangroves	55,197.33	63,089.00	11,638.19	129,924.52
Output 2: Data generated for enhanced decision making and a comprehensive monitoring system of land-use and land-cover (LULC) change along coastal areas of Myanmar	146,953.82	171,224.16	134,858.17	453,036.16
Output 3: Demonstration of integrated land use planning and inclusive forest planning strengthened and linked to national CC mitigation goals	140,610.94	126,628.28	65,283.90	332,523.12
Output 4: Operational models of community-led management of land and forests* (Note: once output 4 and related budget will be approved)	236,429.89	219,851.91	183,569.80	639,851.60
Project (TA) Management, Knowledge Management & Communications	122,806.36	120,132.92	197,726.40	440,665.68

Grand Total	701,998.34	700,926.28	593,076.46	1,996,001.08
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3.2 Efficiency of project implementation

90. The initial project implementation structure, which included engagement with government institutions, provided an optimal way to ensure outputs were achieved with local ownership. However, implementation was affected significantly by the change in the political situation as well as the COVID-19 pandemic. The project had to request no-cost extensions three times from the initial closure date of 24 August 2022 with the first extension request being for 4-months until 31 December 2022; the second request being longer till 31 December 2023, and the third extension till June 2024.
91. The impact of the pandemic was mitigated with adjustments to stakeholder engagements such as switching to virtual platform due to COVID-19 national movement restrictions. Despite the restrictions, there was continuous engagement and coordination with other development and projects, DANIDA, FFI, FAO's SLM-GEF project. The project solicited and facilitated the input of key stakeholders and experts to develop methodologies for the development of ecosystem-based District Forest Management Plan and District Land-use Plan. There were several situations where the project management structure proved to be both effective and efficient in dealing with the complex political situation but ensuring project implementation continued.
92. The project suffered major delays related to both the coup, and the COVID-19 pandemic with project staff not able to undertake field missions or travel into communities. However, the PMU focused on remote support and direct engagement at the community level in coordination with the implementing NGOs. The COVID-19 pandemic and political situation made planning for the implementation challenging since no engagement with the de facto administration was possible and implementation was put on hold for some period in 2021. The management structure was efficient in responding and adjusting to the changing circumstances in the country.

4 CONCLUSIONS AND RECOMMENDATIONS

93. **General Conclusion:** The project was designed with a highly relevant set of interventions well aligned to the objectives of the National REDD+ Strategy and to contribute to Myanmar's NDC obligations. While the project made significant achievements, the impact of the coup in February 2021 curtailed the potential sustainability and long-term impact. The UN-REDD Secretariat should be commended for persisting with implementation and adapting to the situation by partnering with local NGOs and CSO to reach communities. An easy option would have been to abandon the implementation, but the continuation was an important decision that recognized, in part, countries in conflict situations face many challenges and the protection of natural resources is vital.
94. However, the absence of follow-on support is concerning and should be a global concern for development partners. Myanmar remains a signatory to a wide range of international agreements including the UNFCCC, the Convention on Biological Diversity, RAMSAR Convention on wetlands and CITES. Local communities can play a bigger role but require essential financial and technical support which can be provided by and through NGOs/CSOs such as MERN and CDE with backstopping from the UN agencies as has been the case for this TA.
95. Recognizing the need for conflict-sensitive climate change financing strategies is crucial, as they must go beyond purely technical approaches and consider the dynamics of power distribution, access to resources, and social order within vulnerable populations. The lack of explicit recognition of fragility and conflict in international climate change negotiations, multilateral agreements, and aid prioritization has significant negative implications. Conflict-sensitive financing strategies must strive to empower communities, including those that are marginalized, and ensure their meaningful participation and decision-making.
96. **Conclusion 1:** Conflict can have profound and multifaceted impacts on environmental conservation, often exacerbating existing environmental problems and creating new challenges. Myanmar now faces direct environmental damage ranging from habitat destruction, pollution, to deforestation because of weakening of institutions leading to gaps in regulatory framework and inadequate natural resource governance. The inability to work with the military government has resulted in obvious disruptions to conservation efforts and potential loss or destruction of research facilities and loss of valuable scientific data, setting back conservation efforts by years or even decades. Illegal exploitation of resources including over-exploitation of marginal and vulnerable areas such as mangroves for timber, firewood, and agriculture will result in unprecedented degradation and loss of biodiversity. There is a further significant risk that Myanmar will see a rise in poaching and illegal wildlife trade as law enforcement breaks down and rebel groups or militias exploit natural resources to fund their activities.
97. Directing the engagement towards NGOs/CSOs actors are perhaps the only option to support and enhance natural resource stewardship by communities. The safeguards capacity building, data collection and development of forestry inventory methodologies, and monitoring systems will require updating and upscaling therefore additional support would be necessary. Myanmar is at risk of brain drain and loss of experts who have worked on REDD+ for many years and are now redundant.
98. **Recommendation 1:** The UN-REDD Management Group should follow-up discussions with Norway and other member countries to consider continuing to support efforts to protect mangrove ecosystem using the partnership model established under this TA. The implementation model of this TA has been in fact successful and should serve as a model to sustain support for improving sustainable management of not only the mangrove ecosystems, but for the entire forestry sector.
99. **Conclusion 2:** At the activity level, results from Output 2 (data, maps, models, guidance etc.) can easily be maintained with minimum effort. Similarly, the capacity building for CF and CPA management plans, and CFE business plans provide a direct opportunity for communities to build lasting livelihood options, but without continued support and extension services and access to finance, there is a risk that villagers may revert to unsustainable practices. This risk is amplified by the fact that some communities have limited access to land, lack land rights and lack official land titles, which reduces the motivation for resource stewardship due to the absence of government assistance.

100. **Recommendation 2:** (For consideration by the UN-REDD Secretariat and NICFI). Under the political uncertainty in Myanmar, natural resource monitoring systems remain critical and do not necessarily require engagement with the de facto government. FAO could consider continuing supporting remote sensing work for forest monitoring and could coordinate with local NGOs and CSOs to collect data on the ground as has been the case during the implementation of the TA. On safeguards, UNEP and UNEP-WCMC could also continue to work in partnership with local NGOs and CSOs to monitor safeguards implementation and maintain capacity that could be harnessed in the future. In any case, sustaining the capacity of civil society organizations would be essential for subsequent implementation of a subnational REDD+ programs that allow meaningful participation of stakeholders.
101. **Conclusion 3:** The conflict situation is particularly concerning for many ethnic women who make a living by selling forest products and are primary users and managers of the forests. Ethnic women are also engaged in various forest activities, such as establishing nurseries for plantations; selecting seedlings and tree species; replanting timber trees; practicing controlled burning for assisting regeneration; and protecting germinating seedlings and new saplings among other activities and have thus contributed to the prevention of forest degradation. It is therefore necessary that measures continue to be in place to support and protect women and allow continuation of livelihood activities. This is perhaps one of the critical reasons why continued engagement with local partners is necessary.
102. **Recommendation 3:** UN agencies are already working directly focusing on humanitarian and resilience building support in the very same communities and groups affected by persistent conflict, widespread insecurity, surging displacement, and disrupted basic services and destruction of natural resources they rely on for food security. While upscaling activities to support forest dependent communities would prove to be challenging given the lack of engagement with the de facto military leadership and impeded access, the budget to sustain the work of local NGOs and CSOs can be modest but goes a long way to sustain the motivation of local communities to continue forest and mangrove protection activities and safeguard their livelihoods. Villagers understand the value of mangroves and are committed to conservation. There is evidence of empowered communities continuing to manage, conserve, and engage in sustainable business practices within the mangrove ecosystem. Communities feel they benefited from training programs in management planning, business strategy, and financial management. Considerations could be made to integrate environmental and natural resource protection into humanitarian programs, including development of longer-term durable solutions. This evaluation has observed a low participation of women and the UN-REDD agencies are encouraged to formulate actions that encourage higher participation by women. It is therefore necessary that measures continue to be in place to support and protect women and allow continuation of livelihood activities. This is perhaps one of the critical reasons why continued engagement with local partners is necessary.
103. **Conclusion 4:** Protecting natural resources in conflict-affected countries like Myanmar requires a multifaceted approach that addresses the complex interplay between environmental conservation, security, governance, and socio-economic development. There are multiple recommendations that require a coordinated effort among local communities, international organizations, NGOs, and the private sector. Balancing the immediate needs of conflict-affected communities with long-term environmental sustainability is critical for ensuring the protection and sustainable use of natural resources in these challenging contexts. Under current circumstances, Myanmar faces a high potential for resource-driven conflicts unless local communities, civil society and the private sector are supported to identify and mitigate the root causes of conflicts driven by resource competition or exploitation.
104. Recommendations for sustaining natural resource conservation in Myanmar under current political instability.
- i. Strengthening governance and legal frameworks: Support and efforts to ensure clear legal frameworks continue to be acknowledged at community level is necessary. NGOs/CSOs and private sector actors could be a conduit for supporting and continuing implementation of legal frameworks and positive policies prior to 2021. International development partners such as the UN-REDD can play this role effectively as demonstrated by the TA.

- ii. Development partners can promote transparency and accountability by supporting and implementing mechanisms to increase transparency in resource management and hold those exploiting resources illegally accountable. The TA in Myanmar produced important social and environmental safeguard guidelines and resource monitoring tools based on remote sensing that are useful for NGO/CSO actors. These tools can continue to be funded to ensure established systems for monitoring environmental changes and resource use are maintained and shared with NGOs, CSOs and international organizations to improve resource management and response strategies.
- iii. Sustained support for engagement with local communities promoting inclusive participation and involve local communities in decision-making processes regarding the management and protection of natural resources will increase voluntary stewardship for resource protection. This can be complemented by designing resource management strategies that are sensitive to local conflicts and power dynamics.
- iv. Through community empowerment and education, local communities will become more aware of the value of sustaining, managing, and protecting their local environment. The support towards capacity building for sustainable livelihoods, CFEs offers alternatives that reduce dependence on resource exploitation and enhance economic diversification. Encouraging economic diversification reduces the reliance on natural resources for economic stability. UN Agencies can promote environmental diplomacy by engaging and encourage regional cooperation and dialogue on transboundary natural resource management. In this instance, engaging with the other ASEAN would require the UN-REDD to continue implementing multi-country programs such as this TA and include Myanmar.
- v. The ongoing humanitarian and resilience-building response efforts can integrate environmental considerations by conducting environmental impact assessments for projects to avoid unintended harm to natural resources.

5 LESSONS LEARNED

105. **Lesson 1:** The modality adopted for the implementation of the TA following the coup in February 2021 provides important lessons that could be applied in other conflict affected countries. The TA demonstrated that project implementation in a restrictive political environment requires flexibility and agile adaptive capacity.
106. **Lesson 2:** NGOs and CSOs have an important role to play in supporting project implementation in communities in conflict affected countries and in situations where access by international development agencies may be restricted. It is worth considering integrating environmental and natural resource considerations into humanitarian programs, including development of longer-term durable solutions.
107. **Lesson 3:** Conflict affected countries face major development challenges and natural resources often face the threat of complete destruction due to a breakdown in the rule of law, absence of environmental law enforcement and lack of governance. As such, there is need for conflict-sensitive natural resources management financing strategies that go beyond purely technical approaches and consider the dynamics of power distribution, access to resources, and social order within vulnerable populations. The lack of explicit recognition of fragility and conflict in international climate change negotiations, multilateral agreements, and aid prioritization has significant implications. Conflict-sensitive financing strategies must strive to empower communities, including those that are marginalized, and ensure their meaningful participation and decision-making through different channels such as partnerships with NGOs and CSOs as applied in the TA.
108. **Lesson 4:** It is important to note that for a country such as Myanmar, which is in a state of chronic fragility and conflict, the rate of natural resource depletion will increase without sustained support. While it must be acknowledged that there is no easy solution, the model applied by the TA to partner with local NGOs and CSOs to deliver support and build capacity for mangrove management offers hope for long-term sustainability during periods of political instability.
109. **Lesson 5:** Despite the limitations imposed by the military government, innovation and technology should allow continuation of natural resources monitoring through technologies such as remote sensing and community-based methods to project or predict exposure of any risks and potential destruction.